

ABSTRACT

A method of using a user equipment (UE) in a wireless time division duplex communication system. The system uses code division multiple access and communicates using communication bursts. Each communication burst has a unique channelization code and a midamble code which is uniquely related to the channelization code, each such midamble code being uniquely related to one or more channelization code. The UE receives communication bursts and detects each midamble code in a received communication burst. The UE determines the channelization codes related to each detected midamble based on a mapping of midamble codes to related channelization codes. The UE detects channelization codes in the received communication burst from among the determined channelization codes. The UE recovers data from the received communication burst based on in part the detected channelization codes. Where all midamble codes are uniquely related to one channelization code, the UE recovers data from the received communication burst based on in part the determined channelization codes without the additional channelization code detection step.